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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/730,268	12/09/2003	Perry Opin	Q73377	3324

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SUGHRUE MION, PLLC  
2100 PENNSYLVANIA AVENUE, N.W.  
SUITE 800  
WASHINGTON, DC 20037

EXAMINER

WERNER, JONATHAN S

ART UNIT	PAPER NUMBER
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3732

DATE MAILED: 10/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/730,268	<b>Applicant(s)</b> OPIN ET AL.	
	<b>Examiner</b> Jonathan Werner	<b>Art Unit</b> 3732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 7/24/06.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 12-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This action is in response to Applicant's amendment received on 7/24/06.

#### ***Drawings***

2. The annotated drawings were received on 7/24/06. These drawings are acceptable.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 12 recites the limitations "the cut-and-rising portion" and "the convex portion." There is insufficient antecedent basis for these limitations in the claim.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-2, 8-10 and 13-18 are rejected, as understood, under 35 U.S.C. 102(b) as being anticipated by Voudouris (US 6,168,428). As to claim 1, Voudouris discloses an orthodontic bracket comprising a base (14) attachable to teeth surfaces; a bracket main body (12) equipped on one side of the base; an arch wire slot (20) that opposes the base along a mesiodistal direction in the bracket main body; a U-shaped belt-like clip (30) having a catching end portion (36) and a recess portion (142); a guide portion (24/34) formed in at least one of the bracket main body and the base; and a middle groove (i.e. spaced groove between wings 116; Figure 8) formed on a middle area of the bracket main body along a direction perpendicular to the mesiodistal direction. It should be noted that while features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function and thus functional limitations are given little patentable weight. Examiner also notes that newly added claim limitations directed to "a middle groove" remain unclear as to the specific structural limitations as defined by Applicant and is hence interpreted as understood by the Examiner in the rejection above. As to claim 2, the orthodontic bracket's recess portion is a concave portion (column 11, lines 27-28). As to claim 8, Voudouris discloses an orthodontic bracket as previously described, wherein the belt-like clip has a catching cutout portion

Art Unit: 3732

substantially in V-shape (30b). As to claims 9 and 10, the clip has a contacting portion (30a or 38) and the bracket main body has a receiving portion (34 or 24) (Figure 2B). As to claim 13, the cover portion does not cover the recess portion (Figure 1). As to claims 14 and 15, Figures 8-9 show a wall portion formed at an edge of the middle groove such that the wall portion contacts the clip in the releasing position. As to claim 16, the catching cutout portion extends from an edge of the upper end part of the clip (Figure 1). As to claims 17-18, Examiner again notes that Applicant is claiming a statement of intended use, whereby such statements and other functional limitations are given little patentable weight since they do not impose any structural limitations on the claims distinguishable over the prior art which is capable of being used as claimed if one so desires – i.e. manipulating the clip so it does not come into contact with the bracket main body before it is moved to a releasing position.

5. Claims 1-2, 13-14 and 17 are additionally rejected under 35 U.S.C. 102(e) as being anticipated by Orikasa (US 6,776,613). As to claim 1, Orikasa discloses an orthodontic bracket comprising a base (11) attachable to teeth surfaces; a bracket main body (12) equipped on one side of the base; an arch wire slot (13) along a mesiodistal direction in the bracket main body; a U-shaped belt-like clip (20) having a catching end portion (21) and a recess portion (25); a guide portion (34) formed in at least one of the bracket main body and the base; and a middle groove (i.e. spaced groove between wings 38B/38C; Figure 5) formed on a middle area of the bracket main body along a direction perpendicular to the mesiodistal direction. As to claim 2, the orthodontic

Art Unit: 3732

bracket's recess portion is a concave portion (column 3, lines 19-28). As to claim 13, the cover portion does not cover the recess portion (Figure 1). As to claim 14, Figures 5-8 show a wall portion formed at an edge of the middle groove such that the wall portion contacts the clip in the releasing position. As to claim 17, Examiner again notes that Applicant is claiming a statement of intended use, whereby such statements and other functional limitations are given little patentable weight since they do not impose any structural limitations on the claims distinguishable over the prior art which is capable of being used as claimed if one so desires – i.e. manipulating the clip so it does not come into contact with the bracket main body before it is moved to a releasing position.

6. Claims 1, 9, 13-14 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Christoff (US 6,071,119). As to claim 1, Christoff discloses an orthodontic bracket comprising a base (22) attachable to teeth surfaces; a bracket main body (20) equipped on one side of the base; an arch wire slot (30) along mesiodistal direction in the bracket main body; a U-shaped belt-like clip (32) having a catching end portion (34) and a recess portion (64g,65g); a guide portion (46) formed in at least one of the bracket main body and the base; and a middle groove (i.e. spaced groove between wings 26; Figure 2) formed on a middle area of the bracket main body along a direction perpendicular to the mesiodistal direction. Furthermore, Examiner notes that Christoff shows in Figure 2 another instance of a middle groove (top side of wings 26) formed along a direction perpendicular to the mesiodistal direction. As to claim 9, the

Art Unit: 3732

clip has a contacting portion (end portion of 34a) and the bracket main body has a receiving portion (43a,44a,46a) (Figure 6). As to claim 13, the cover portion does not cover the recess portion (Figure 17). As to claim 14, Figures 3-5 show a wall portion formed at an edge of the middle groove such that the wall portion contacts the clip in the releasing position. As to claim 17, Examiner again notes that Applicant is claiming a statement of intended use, whereby such statements and other functional limitations are given little patentable weight since they do not impose any structural limitations on the claims distinguishable over the prior art which is capable of being used as claimed if one so desires – i.e. manipulating the clip so it does not come into contact with the bracket main body before it is moved to a releasing position.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 3-7 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Voudouris in view of Damon (US 6,071,118). Voudouris discloses the orthodontic bracket as previously described, but fails to show the recess portion comprises a convex portion that protrudes from an outer surface of the clip. Damon, however, teaches an orthodontic bracket that comprises a clip (30) with a recess portion that is a cut-and-rising portion (Figure 7) comprising a convex portion (37/39) that protrudes from

Art Unit: 3732

an outer surface of the clip in a direction facing away from the bracket main body (i.e. Figures 1-8). Therefore, it would have been obvious to one having ordinary skill in the art at the time of Applicant's invention to modify the recess portion as just described in order to provide an engagement means for a manipulating tool as taught by Damon. As to claims 4 and 5, Figure 7 shows the convex portion is formed at an edge of the upper end part of the clip. As to claim 6, the convex portion is shaped substantially in a half-spherical dome (i.e. Figure 7). As to claim 7, Voudouris shows a recess portion that is a V-shaped cutout (30B). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the applicant's invention to make the convex portion a V-shaped cutout in order to accommodate a tool to facilitate unlocking of the clip as taught by Voudouris. As to claim 12, Damon discloses a cut-and-rising portion which comprises a concave portion (38) connected to a convex portion (37).

8. Claims 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Orikasa in view of Damon. Orikasa discloses the orthodontic bracket as previously described, but fails to show the recess portion comprises a convex portion that protrudes from an outer surface of the clip. Damon, however, teaches an orthodontic bracket that comprises a clip (30) with a recess portion that is a cut-and-rising portion (Figure 7) comprising a convex portion (37/39) that protrudes from an outer surface of the clip in a direction facing away from the bracket main body (i.e. Figures 1-8). Therefore, it would have been obvious to one having ordinary skill in the art at the time of Applicant's invention to modify the recess portion as just described in order to provide



Art Unit: 3732

an engagement means for a manipulating tool as taught by Damon. As to claims 4 and 5, Figure 7 shows the convex portion is formed at an edge of the upper end part of the clip. As to claim 6, the convex portion is shaped substantially in a half-spherical dome (i.e. Figure 7).

9. Claims 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Christoff in view of Damon. Christoff discloses the orthodontic bracket as previously described, but fails to show the recess portion comprises a convex portion that protrudes from an outer surface of the clip. Damon, however, teaches an orthodontic bracket that comprises a clip (30) with a recess portion that is a cut-and-rising portion (Figure 7) comprising a convex portion (37/39) that protrudes from an outer surface of the clip in a direction facing away from the bracket main body (i.e. Figures 1-8).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of Applicant's invention to modify the recess portion as just described in order to provide an engagement means for a manipulating tool as taught by Damon. As to claims 4 and 5, Figure 7 shows the convex portion is formed at an edge of the upper end part of the clip. As to claim 6, the convex portion is shaped substantially in a half-spherical dome (i.e. Figure 7).

10. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Orikasa in view of Damon further in view of Voudouris. Orikasa and Damon disclose an orthodontic bracket as previously described, but fail to show the recess portion has a

Art Unit: 3732

cutout substantially in V-shape at a flat end part thereof. Voudouris, however, teaches an orthodontic bracket with a U-shaped clip that has a recess portion that is a V-shaped cutout (30b). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the applicant's invention to make the recess portion a V-shaped cutout in order to accommodate a tool to facilitate unlocking of the clip as taught by Voudouris.

11. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Christoff in view of Damon further in view of Voudouris. Christoff and Damon disclose an orthodontic bracket as previously described, but fail to show the recess portion has a cutout substantially in V-shape at a flat end part thereof. Voudouris, however, teaches an orthodontic bracket with a U-shaped clip that has a recess portion that is a V-shaped cutout (30b). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the applicant's invention to make the recess portion a V-shaped cutout in order to accommodate a tool to facilitate unlocking of the clip as taught by Voudouris.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1 and 8 have been considered but are moot in view of the new ground(s) of rejection. Additionally, Examiner again notes that newly added claim limitations directed to "a middle groove" remain unclear as to the specific structural limitations as defined by Applicant and is hence interpreted as understood by the Examiner in the rejections above.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

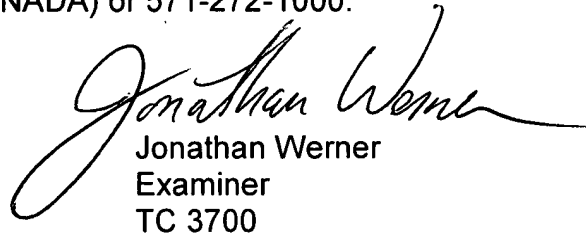
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Werner whose telephone number is (571) 272-2767. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cris Rodriguez can be reached on (571) 272-4964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3732

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Jonathan Werner  
Examiner  
TC 3700

10/3/06

  
MELBA N. BUMGARNER  
PRIMARY EXAMINER